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REQUEST FOR APPROVAL OF A
CONSENT ORDER
APRIL 24, 1984

MINNESOTA POLLUTION CONTROL AGENCY
Division of Solid and Hazardous Waste

Agenda Item Control Sheet

Agenda # 12

MEETING DATE: April 24, 1984 APPEARANCE REQUESTED - YES: X NO:
SCHEDULED TIME:

PREPARED BY: Edward R. Meyer DATE PREPARED: April 4, 1984
DATE MAILED: April 13, 1984

SUBJECT: Request for Approval of a Consent Order with The Nutting Company
(Nutting) for the Purpose of Conducting a Remedial Investigation and
Possibly a Remedial Action Feasibility Study at and near the Nutting
Facility in Faribault

LOCATION: Faribault Rice
CITY COUNTY

TYPE OF ACTION:

Permit <u> </u>	Request For Hearing <u> </u>	New <u> </u>
Stipulation <u> </u>	Request for legal action <u> </u>	Modification <u> </u>
Contract <u> </u>	Variance request (feedlot) <u> </u>	Extension <u> </u>
Policy <u> </u>	Rulemaking <u> </u>	Revocation <u> </u>
Information <u> </u>	Administrative order <u> </u>	Other <u>X</u>

RECOMMENDED ACTION: Approval X No action needed
Denial Authorization

ISSUE STATEMENT:

Ground water beneath the Nutting Company (Nutting) property in Faribault is contaminated with hazardous substances resulting from Nutting's disposal of wastes in an open pit on Nutting property. The extent and magnitude of ground water contamination must be determined. The Minnesota Pollution Control Agency (MPCA) staff is recommending that the MPCA enter into a Consent Order with Nutting for the purpose of conducting a remedial investigation and, if required by the MPCA Director upon remedial investigation completion, a remedial action feasibility study at and near the Nutting facility in Faribault.

ATTACHMENTS:

1. Consent Order with Exhibits
2. Site Map
3.
4.

MINNESOTA POLLUTION CONTROL AGENCY
Solid and Hazardous Waste Division
Site Response Section

Request for Approval of a Consent Order with The Nutting Company (Nutting)
for the Purpose of Conducting a Remedial Investigation and Possibly a
Remedial Action Feasibility Study at and near the Nutting Facility in Faribault

April 24, 1984

ISSUE STATEMENT

Ground water beneath The Nutting Company (Nutting) property in Faribault is contaminated with hazardous substances resulting from Nutting's disposal of wastes in an open pit on Nutting property. The extent and magnitude of ground water contamination must be determined. The Minnesota Pollution Control Agency (MPCA) staff is recommending that the MPCA enter into a Consent Order with Nutting for the purpose of conducting a remedial investigation and, if required by the MPCA Director upon remedial investigation completion, a remedial action feasibility study at and near the Nutting facility in Faribault.

I. BACKGROUND

Nutting has produced a variety of hand pushable carts and caster wheels over the past 92 years at its plant in Faribault. Beginning in 1959, Nutting used a seepage pit on its property to dispose of numerous chemical compounds. In 1979 the MPCA staff issued a notice of non-compliance and as a result, Nutting excavated the contents of the pit and backfilled the pit with clean fill, thereby removing the then apparent source of potential ground water contaminants. Nutting's sampling and analyses at the time of the excavation have shown that ground water beneath the pit was contaminated with cadmium, lead, cyanide, methylene chloride, trichloroethylene, and xylene. Of these compounds, trichloroethylene has been detected at high levels in ground water at the boundary of the Nutting property.

In August, 1982, the MPCA staff requested that Nutting investigate the extent and magnitude of contamination moving off of the Nutting property. Nutting said it could not afford to conduct the requested investigation. In October and early November, 1982, well water analyses showed that all five

Faribault municipal wells were contaminated with trichloroethylene and other hazardous substances. Although the levels of contamination did not exceed action levels for protection of public health, this discovery of municipal well contamination caused MPCA staff to place a high priority on defining the contamination plume leaving the Nutting property. The MPCA staff proposed that the Nutting facility be included on the U.S. Environmental Protection Agency (EPA) National Priority List (NPL). The Nutting facility was tentatively included by the EPA on the NPL in August, 1983 with a score of 51.

Subsequent to the discovery of municipal well contamination, Nutting and MPCA staff disagreed on the follow-up remedial investigation actions which were necessary. This situation led to issuance of a Request for Response Action (RFRA) by the MPCA Board on September 27, 1983.

II. DISCUSSION

The negotiation of a Response Order by Consent (Order) between Nutting and the MPCA staff has been successfully completed. The MPCA staff and Nutting have agreed upon the following actions in the proposed Order:

A. Remedial Investigation

Nutting shall conduct a Remedial Investigation to (1) determine the extent and level of ground water contamination caused by Nutting's disposal practices in the drift/St. Peter aquifer and in the underlying Prairie du Chien aquifer and (2) determine whether another source of contamination (i.e., another hazardous substance disposal area or contamination from a barrel storage area) exists on the south end of the Nutting property. The investigation of ground water contamination will require installation of ground water monitoring wells in a downgradient direction from the Nutting property with respect to ground water flow in the drift/St. Peter aquifer. These wells

will be installed in successive phases over a period of about one year until the extent and level of contamination is adequately defined.

B. Search for Additional Contamination Sources

Nutting has been very concerned that other parties may be contributing to the Faribault ground water contamination situation. The MPCA staff has been investigating other potential sources of contamination. Therefore, the Order calls for the MPCA staff to use its best efforts to determine whether sources of contamination, other than Nutting, exist and are contributing to ground water contamination. If another source(s) is discovered, MPCA staff will recommend that the MPCA Board issue a RFRA to request that the responsible person(s) conduct the necessary additional remedial investigation. If necessary, the MPCA Director will recommend that the MPCA Board issue a Determination of Inadequate Response and undertake the remedial investigation when and if the site is eligible for funding.

C. Remedial Action Feasibility Study

The MPCA Director will determine at the conclusion of the remedial investigation whether a feasibility study is necessary and will base that decision upon the results of the remedial investigation. The MPCA Director shall, if other parties responsible for the Faribault ground water contamination are found, direct Nutting to either (1) temporarily suspend work on the feasibility study pending completion of other remedial investigation activities in the area or (2) complete a feasibility study for mitigating ground water contamination with respect to only those contaminants which have resulted from Nutting's past disposal practices. The feasibility study will be completed within about ten months.

D. Recovery of Expenses

Nutting has agreed to pay \$8,500 into the state's Environmental Response, Compensation and Compliance Fund as reimbursement of the MPCA's expenses through April 24, 1984.

III. CONCLUSIONS

Based upon the RFRA issued to Nutting and upon the statement of facts in Section C of the attached proposed Order, the MPCA staff believes that the remedial investigation and the remedial action feasibility study, if required, which are specified in the proposed Order are the most appropriate actions to be taken at this time to protect the public health and welfare, as well as the environment of Minnesota.

IV. RECOMMENDATIONS

The MPCA staff recommends that the MPCA Board approve the Order with The Nutting Company for the purpose of conducting a remedial investigation and, if required by the MPCA Director, a remedial action feasibility study at and near the Nutting facility in Faribault by adopting the suggested staff resolution.

SUGGESTED STAFF RESOLUTION

WHEREAS, on the basis of testing and analysis, the Minnesota Pollution Control Agency (MPCA) has determined that the disposal of hazardous substances at The Nutting Company (Nutting) facility in Faribault, Minnesota, has given rise to a release of hazardous substances;

WHEREAS, the MPCA has determined that the release may be causing ground water contamination;

WHEREAS, the MPCA has determined that Nutting is a responsible person within the meaning of Minn. Stat. § 115B.03;

WHEREAS, the MPCA has determined that the actions to be taken to respond to the release are reasonable and necessary to protect the public health and welfare or the environment; and

WHEREAS, the MPCA has determined that a reasonable time for beginning and completing response actions has been provided;

NOW THEREFORE BE IT RESOLVED, that the MPCA approves and adopts the Response Order by Consent (Order) between the MPCA and Nutting which provides for conducting a remedial investigation and, if required by the MPCA Director, a remedial action feasibility study at and near the Nutting facility in Faribault.

BE IT FURTHER RESOLVED, that the Chairperson and the Director are hereby authorized to execute the Order on behalf of the MPCA.

STATE OF MINNESOTA
POLLUTION CONTROL AGENCY

In the Matter of The)	
Nutting Company, Faribault,)	
Minnesota, Proceedings)	
Under Section 17 and 18)	RESPONSE ORDER
of the Minnesota)	BY CONSENT
Environmental Response)	
and Liability Act)	
)	

IT IS HEREBY STIPULATED AND AGREED by and among the parties hereto as follows:

A.

Jurisdiction

This RESPONSE ORDER BY CONSENT (Order) is issued pursuant to the authority vested in the Minnesota Pollution Control Agency (MPCA) by the Environmental Response and Liability Act of 1983 (ERLA), Minn. Stat. Ch. 115B, and by Minn. Stat. Chs. 115 and 116.

On the basis of the testing and analysis described in the Statement of Facts, *infra*, and the MPCA's files and records, the MPCA has determined that the previous disposal of hazardous substances at a disposal site on property owned by The Nutting Company (Company) has given rise to a release of hazardous substances, and that the release is causing ground water contamination. In addition, the MPCA has determined that (1) the Company is a responsible person within the meaning of Section 3 of ERLA; (2) the Company's property constitutes a facility (property)

within the meaning of Section 2, subd. 5 of ERLA; (3) the actions to be taken pursuant to this Order are reasonable and necessary to protect the public health or welfare or the environment; (4) a reasonable time for beginning and completing the actions required by this Order has been provided for; and (5) the Company will undertake the actions requested by the MPCA in this Order.

In signing this Order, the Company does not admit liability or responsibility and retains the right to controvert in any subsequent proceedings, the validity of any of the determinations made herein by the MPCA. Nothing herein shall be construed as a waiver of any statutory or common law defenses which the Company may wish to raise in any action to enforce the terms of this Consent Order or in any other proceeding. The Company does, however, hereby specifically agree to undertake all actions required of it by the terms and conditions of this Order within the time periods set out herein, subject to any amendments, modifications or extensions of time related thereto.

B.

Parties

This Order shall apply to and be binding upon the the Company and the MPCA.

C.

Statement of Facts

1. The Company is a small manufacturing facility located in Faribault, Minnesota. Since 1891 the Company has produced a variety of hand pushable carts and caster wheels.

2. Wastes have been produced as a result of the Company's manufacturing process throughout most of its existence. However, disposal locations were not documented prior to 1959.

3. Beginning in 1959, a pit on the the Company's property was used for disposal of wastes and limited amounts of sludges.

4. In April of 1979 the MPCA Staff issued a Notice of Noncompliance to the Company regarding its disposal practices.

5. In 1980, the Company excavated all contaminated soils associated with the disposal pit. The contaminated soils were landspread pursuant to a MPCA State Disposal System permit for one time spreading of sludge. The pit was backfilled and then paved.

6. In 1979, prior to the excavation of the contaminated soils, analysis of ground water samples from three monitoring wells installed by the Company near the pit on the Company property showed that the ground water beneath the pit was contaminated with cadmium, lead, cyanide, methylene chloride, trichloroethylene and xylene.

7. Two additional ground water monitoring wells were installed by the Company on its property in 1981 after excavtion of the contaminated soils. A sixth monitoring well was installed by the Company on its property in 1983. The March 1983 ground water test results from these wells evidenced trichloroethylene levels of 447 ppb in Well B-4, 57 ppb in Well B-5 and non-detectable levels in B-6.

8. In August of 1982 the MPCA requested that the Company install three additional drift/St. Peter aquifer wells in a down gradient direction with respect to the ground water flow direction

in this aquifer and that the wells be located four to five blocks from the Company's property. The MPCA also requested that the Company install one Prairie du Chien aquifer well. These wells were requested in order to identify the extent of contamination originating from the Company's property. Because the Company is experiencing severe financial problems, the Company proposed an alternative to the MPCA request and installed an additional ground water monitoring well B-6 on the Company's property in March, 1983. The MPCA staff did not approve the proposal and determined that the installation of a monitoring well only on the Company's own property was inadequate to determine the extent of contamination originating from the Company's property.

9. The U.S. Environmental Protection Agency (EPA) recommended drinking water criteria for trichloroethylene is 27 parts per billion (ppb).

10. Trichloroethylene is a hazardous substance under Section 2, subd. 8 of ERLA.

11. On September 27, 1983, the MPCA Board issued a Request for Response Action to the Company requesting the Company to undertake a remedial investigation to determine the extent of ground water contamination originating from the Company's property.

12. The City of Faribault's five operating wells (municipal wells) are located as close as approximately one-half mile from the Company's property. Four of the wells are south of the Cannon River and down gradient from the Company's property with respect to ground water flow direction in the drift/St. Peter aquifer. A

fifth municipal well is located north of the Cannon River. One additional municipal well south of the Cannon River was abandoned at an undetermined time.

13. Beginning in 1982, samples taken from the municipal wells showed varying levels of trichloroethylene, 1,1-dichloroethylene and other hazardous substances. 1,1-dichloroethylene has not been detected in ground water monitoring wells on the Company's property.

14. The levels of trichloroethylene and 1,1-dichloroethylene have regularly been detected in two of the municipal wells and have exceeded drinking water criteria on occasion. However, because Faribault mixes water from all five wells in a reservoir prior to distribution, the distributed water has not exceeded drinking water criteria for trichloroethylene. In samples analyzed by a private laboratory for the City of Faribault, 1,1-dichloroethylene levels in the reservoir exceeded EPA recommended drinking water criteria on two occasions; in June and September of 1983.

15. In April of 1983 the Minnesota Department of Health recommended that the City of Faribault use a different pumping schedule to reduce contaminant levels.

16. Further investigation is necessary to determine the extent of contamination originating from the Company's property and whether the Company is or is not the source of trichloroethylene and other hazardous substances in the municipal wells.

17. Implementation of this Order is necessary to protect the public health or welfare or the environment.

ORDER AND AGREEMENT

Based on the information available to the parties on the effective date of this Order, and without Nutting's admission of liability on the factual assertions of the MPCA, IT IS HEREBY ORDERED AND AGREED AS FOLLOWS:

I.

Scope of Order

This Order shall govern the following matters:

1. Investigation of the extent of ground water contamination originating from the Company's property; and
2. The preparation of a remedial action feasibility study, if necessary, based on the results of the investigation of the ground water contamination originating from the Company's property.

This Order does not cover any remedial action which may be necessary nor does it cover any matter other than those described above.

II.

Definitions

A. Unless otherwise explicitly stated, the definitions provided in Minn. Stat. § 115B.02 (Supp. 1983) shall control the meaning of the terms used in this Order.

B. Cost effective, when used in this Order or in Exhibits A to this Order, shall mean the lowest cost alternative that is technologically feasible and reliable and which effectively mitigates and minimizes damage to and provides protection of public health, welfare, or the environment.

III.

Remedial Investigation

The Company shall complete a remedial investigation (RI) of ground water contamination originating from and reasonably attributable to its property pursuant to the terms of Part V of Exhibit A to this Order. Exhibit A is attached hereto and made an integral and enforceable part of this Order.

IV.

MPCA Action Regarding Other Responsible Parties

The MPCA shall use its best efforts to identify sources of contamination which are suspected to have resulted from disposal practices of persons, other than the Company, and which are believed to contribute to contamination in or near the area of the RI conducted under this Order by issuing Requests for Information to any and all persons it has reason to believe are responsible persons in accordance with Minn. Stat. § 115B.17, subd. 3. The MPCA shall copy the Company with all Requests for Information issued by the MPCA and all responses thereto. For each person, other than the Company, that the MPCA Director has reason to believe is a responsible person, the MPCA Director shall prepare a proposed Request for Response Action pursuant to Minn. Stat. §§ 115B.17 and 115B.18 requesting the person to investigate any contamination reasonably attributed to that person's activities. The MPCA Director shall request the MPCA to issue the Requests for Response Action. If the MPCA issues a Request for Response Action and the responsible person(s) to whom it is directed refuse(s) to take the requested actions in the manner and within the time requested, the MPCA Director

shall request that the MPCA issue a Determination of Inadequate Response, pursuant to Minn. Stat. § 115B.17, subd. 1, to each of the responsible persons who have failed to adequately respond.

The MPCA agrees that, with respect to other sources of contamination for which there is no responsible person or for which a responsible person has refused to take the requested actions, the Agency will undertake the remedial investigation when and if the site is eligible for funding under the rules establishing a permanent list of priorities promulgated pursuant to Minn. Stat. § 115B.17, subd. 13 (Supp. 1983).

V.

Remedial Action Feasibility Study

Based on and as a part of the RI conducted pursuant to Part III of this Order, the Company shall make a recommendation to the MPCA Director regarding the need for a Remedial Action Feasibility Study (FS). Subject to the dispute resolution provisions of Part VI of this Order, if the MPCA Director determines, based on a review of the RI, that an FS is necessary, the Company shall complete the FS pursuant to the terms of Part VI of Exhibit A. The FS shall identify and assess remedial actions to remedy contamination of ground water, including remedies for contamination, if any, of private wells and Faribault municipal wells, attributable to the Company property.

If sources of contamination which are suspected to have resulted from disposal practices of a person(s) other than the Company are identified in or near the area of the RI conducted under this Order prior to commencement of the FS, and are believed to contribute to contamination in or near the area, the MPCA Director shall direct the Company to (1) temporarily suspend work on the FS pending completion of other remedial investigatory activities in the area, or (2) complete an FS with respect to only those contaminants which have resulted from the Company's disposal practices. If the MPCA Director suspends work on the FS under this Part, the time schedules for the completion of the FS shall be extended by the period of the suspension.

VI.

Resolution of Disputes

A. If a dispute arises as to the meaning of any part of this Order, other than with respect to the approval of submittals, the Company shall provide the MPCA Director with a written statement supporting its position. The MPCA Director shall issue an order resolving the questions. The order shall be considered a final action of the MPCA regarding the issue in dispute.

B. In the event there is a dispute between the MPCA and the Company regarding any submittal, document, report, or schedule (collectively "submittal"), delivered to the MPCA, including a recommendation on the need for a Remedial Action Feasibility Study, the dispute shall be resolved in the following manner.

1. The MPCA Director shall review all submittals made by the Company as required by this Order within twenty-one (21) calendar days of receipt and notify the Company by the twenty-first calendar day, or the first working day thereafter, of her approval, disapproval, or modification of the submittal. In the event the submittal is approved, it shall become an integral and enforceable part of this Order. In the event that the submittal is disapproved in whole or part, the MPCA Director shall notify the Company of the specific inadequacies in writing, and shall indicate the necessary amendments or revisions. In the event that the submittal is modified, the MPCA Director shall notify the Company of the specific modification(s) made to the submittal and the reason(s) for the modification(s).

2. Within fourteen (14) calendar days of receipt of any notice of disapproval or modification, or on the first working day thereafter, the Company shall (1) submit revisions to correct inadequacies, (2) respond to the modification, or (3) state in writing the reasons why the submittal, as originally submitted, should be approved.

3. If, within fourteen (14) calendar days from the date of the Company's submission under 2, above, or the first working day thereafter, the parties have not reconciled all issues in disagreement, the MPCA Director may make any changes in the submittal as she deems necessary. The changes shall become an integral and enforceable part of this Order. Any changes shall be deemed "final administrative actions" of the MPCA regarding this Order.

4. All submittals or modifications thereto shall be technologically feasible, cost effective, and in accordance with sound engineering practice. The MPCA shall give due consideration to the economic impact of any submittal and any modifications to a submittal as provided in Minn. Stat. § 116.07.

5. The MPCA and the Company shall provide the opportunity to consult with each other during the review of submittals or modifications under this Part.

6. Failure of the Company to comply with a modification made to the Order pursuant to this Part shall not void the entire Order. The MPCA may, however, apply to a court of competent jurisdiction for an Order enforcing the modification made to this Order.

VII.

Creation of Danger

In the event the Company's Project Leader or the MPCA Director determines that activities implementing or in noncompliance with this Order, or any other circumstances or activities, are creating an actual danger to the health or welfare of the people on the Company property or in the surrounding area or to the environment, including the Company's property, the Company's Project Leader on his or her own initiative may order that further implementation of this Order be stopped for such period of time as is necessary to abate the danger, or the MPCA Director may order the Company to stop further implementation of this Order for such period of time as is necessary to abate the danger or may petition a court of

competent jurisdiction for such an Order. If implementation of this Order is stopped by the Company, it shall immediately notify the MPCA of the stoppage and the reasons therefor. During any stoppage of work under this paragraph, the Company's obligations with respect to the work ordered to be stopped shall be suspended and the time period for implementation shall be extended, pursuant to Part XVII of this Order, for such a period as the MPCA Director determines is reasonable under the circumstances.

VIII.

Reporting

Unless otherwise specified, documents submitted by the Company pursuant to this Order shall be sent by mail and addressed as follows:

Edward Meyer
Solid and Hazardous Waste Division
Minnesota Pollution Control Agency
1935 West County Road B-2
Roseville, Minnesota 55113

Documents prepared by the MPCA pursuant to this Order shall be provided to the Company by mailing a copy of the document to:

Wayne Nelson *Stuart Sheff*
The Nutting Company *new president of*
1201 West Division Street *11/85*
Faribault, Minnesota 55201

~~WAYNE NELSON~~
THE NUTTING COMPANY
505 WEST AIRPORT DRIVE
WATERTOWN, SOUTH DAKOTA 57201
605-882-3000
800-533-0337

New address as of 6/27/84.

IX.

Project Leaders

The Company and the MPCA shall each designate a Project Leader and alternate for the purpose of overseeing the implementation of this Order. To the maximum extent possible, communications between the Company and the MPCA concerning the terms and conditions of this Order

shall be directed through the Project Leaders. Each Project Leader shall be responsible for assuring that all communications from the other Project Leader are appropriately disseminated and processed. The parties shall notify each other of the names of their Project Leader and alternate within ten (10) days of the effective date of this Order. Should it become necessary for a party to change the Project Leader or alternate assigned under this Order, the party making the change shall promptly notify the other party of the change.

During the implementation of this Order, the Project Leaders shall have at least the authority to (1) take samples or direct that samples be taken; (2) the MPCA Project Leader may direct that work stop for a period not to exceed 24 hours whenever the MPCA Project Leader determines that activities at the site create an actual danger to public health or welfare or the environment; (3) observe, take photographs and make such other reports on the progress of the work as the Project Leader deems appropriate; (4) review records, files and documents relevant to this order; and (5) make or authorize minor field modifications in the work plans or in techniques, procedures or design utilized in carrying out this Order, which modifications are necessary to the completion of the project. Any field modifications shall be approved orally by all Project Leaders prior to being implemented. Within forty-eight (48) hours following the minor field modification, the Project leader who requested the modification shall prepare a memorandum detailing the modification and shall provide or mail a copy of the memorandum to the other Project Leader.

The MPCA Project Leader or alternate shall either be on-site or available on call during all hours of work. The absence of any Project Leader from the Company's property shall not be cause for stoppage of work.

This Part shall not be construed as limiting the authority of the Company or the MPCA under Part VII of this Order.

X.

Sampling and Data Availability

The MPCA Director and the Company shall make available to each other the results of sampling and testing as well as any monitoring data generated by the MPCA or the Company, or on their behalf, which result from the implementation of this Order. The Company and the MPCA shall, upon request, allow split or duplicate samples to be taken from any sampling or testing conducted by the other party during the implementation of this Order. Each Project Leader shall endeavor to notify the other Project Leader at least forty-eight (48) hours in advance of any sample collection so that the Project Leader may obtain split or duplicate samples. If it is not possible to provide forty-eight (48) hours prior notification, each Project Leader shall notify the other Project Leader as soon as possible after he or she becomes aware that samples will be collected.

XI.

Confidential Information

The Company may assert a business confidentiality claim covering part or all of the information requested by this Order

pursuant to Minn. Stat. §§ 116.075, 15.1612, and 15.1673.

Analytical data shall not be claimed as confidential by the Company. If determined confidential by the MPCA Director, the information will be afforded protection under Minn. Stat.

§§ 116.075, 15.1612, and 15.1673. If no such claim accompanies the information when it is submitted to the MPCA Director, it may be made available to the public without further notice to the Company.

XII.

Other Claims

Nothing herein is intended to release any claims, causes of action or demands in law or equity against any person, firm, partnership or corporation not a signatory to this Order.

The MPCA shall not be held as a party to any contract entered into by the Company in carrying out the terms of this Order.

XIII.

Covenant Not To Sue

To avoid adjudication between the parties hereto and the expense that would be incurred in connection with such adjudication, and to set to rest the differences existing among them based on information known to the parties as of the effective date of this Order, without impairing or affecting the claims of the MPCA or the Company in connection with the Company property, and for and

in consideration of the commitments made by each of the parties to this Order, the MPCA covenants not to bring any civil claims which the MPCA may have against the Company with respect to liability under Minn. Stat. Ch. 115B for remedial investigations and a remedial action feasibility study, if required.

This Order shall not be construed as (1) releasing the Company from responsibility or liability for any remedial or removal actions other than those matters identified above, or (2) precluding the MPCA from bringing an action to enforce the terms of this Order.

XIV.

Other Applicable Laws

All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations, including laws and regulations related to occupational safety and health unless an exemption from such requirements is specifically provided. In the event there is a conflict in the application of local, state or federal laws or regulations, the more stringent of the conflicting provisions shall apply.

XV.

Recovery Of Expenses

Within thirty (30) days of the effective date of this Order, the Company shall pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of

Minnesota the sum of \$8,500 as reimbursement of the MPCA's expenses in connection with the investigation of the Company facility through April 24, 1984. Payment of this sum shall be in full and complete satisfaction of all monetary claims of the MPCA through April 24, 1984, related to the Company property.

The Company shall also reimburse the MPCA for its reasonable and necessary costs associated with the implementation of this Order, which costs shall not exceed \$7,500 in any calendar year. Within thirty (30) days of the end of each calendar year, the MPCA will submit to the Company an itemized statement of its expenses for the previous year. Following receipt of the itemized statement the Company shall pay, within sixty (60) days, into the Environmental Response, Compliance and Compensation Fund of the Treasury of the State of Minnesota the required sum. Any dispute between the Company and the MPCA regarding reasonable and necessary administrative costs shall be resolved in accordance with the provisions of Part VI of this Order. Payment by the Company of the MPCA's reasonable and necessary administrative costs under this Part shall terminate on the effective date of termination of this Order in accordance with Part XXI hereof.

XVI.

Liquidated Damages

The Company shall pay into the Environmental Response, Compensation and Compliance Fund of the Treasury of the State of Minnesota the sum of five hundred dollars (\$500) for each week or

portion thereof that the Company fails to submit to the MPCA Director the documents required by Exhibit A to this Order in accordance with the time schedules set forth in Exhibit A, or fails to submit within the time specified in paragraph XVIII, a certificate of insurance which complies with the requirements of paragraph XVIII, unless an extension of the time schedules is granted as provided in paragraph XVII of this Order.

Upon the determination by the MPCA that the Company is not in compliance with any of the provisions referenced above, the MPCA shall immediately give written notice to the Company of the non-compliance, which notice shall specify the provision allegedly not complied with and the date the noncompliance commenced. The liquidated damages shall accrue from the date which the document was to be submitted to the MPCA under Exhibit A, or under paragraph XVIII of this Order. Upon the curing by the Company of the noncompliance set forth in the notice, the liquidated damages shall cease to accrue with respect to the particular matter described in the notice provided, however, the Company shall be excused from paying such damages if the Company meets the final date for completion of all work required by this Order.

XVII.

Amendment of Order

This Order may only be amended by a written agreement between the Company and the MPCA Board, except that the MPCA Director may amend the Order by extending any time schedule set forth in

Exhibit A for a period of time not to exceed ninety (90) days per extension. Any such extension(s) must be requested by the Company in writing and shall be granted only where the Company has demonstrated good cause for the extension(s). Delays which result from circumstances beyond the control of the Company shall, upon demonstration of such circumstances, constitute good cause for an extension of a time schedule.

XVIII.

Liability Insurance

The Company shall, within thirty (30) days of the effective date of the Order, provide the MPCA Director with a current certificate of insurance certifying coverage for general liability with minimum limits of \$500,000 per occurrence with an annual aggregate of \$500,000 and a \$3,000,000 umbrella exclusive of legal defense costs, for bodily injury and property damage liability combined and containing the provision that the insurance shall not be cancelled for any reason except after thirty (30) days notice. These insurance limits are not to be construed as maximum limits. The Company is solely responsible for determining the appropriate amount of insurance it should carry for injuries or damages resulting from implementation of this Order.

XIX.

Conveyance of Title

No conveyance of title, easement, or other interest in the

Company property shall be consummated by the Company without provision for the Company to carry out the terms of this Order.

XX.

Remedial or Removal Work

The execution of this Order shall not preclude the MPCA from issuing to the Company a Request for Response action for remedial or removal actions if the MPCA determines, based on the information gathered pursuant to this Order and other information available to the MPCA, that remedial or removal actions must be taken at or near the Company property. If remedial or removal actions are found to be necessary in the area of the RI undertaken pursuant to this Order, the MPCA Director agrees that she will make all reasonable efforts in accordance with Part IV of this Order to secure the cooperation of each person the MPCA Director has reason to believe is a responsible person.

XXI.

Termination

The provisions of this Order shall terminate upon the completion of the investigation of contamination originating from the Company's property required by Part V of Exhibit A to this Order, unless an FS is required under the terms of this Order. If an FS is required, the provisions of this Order shall terminate upon the acceptance of the study by the MPCA Director. The FS shall be accepted by the MPCA Director if it meets the requirements of Part VI of Exhibit A to this Order.

XXII.

Access to Property

The Company shall use its best efforts to obtain access to property upon which the Company, its contractors and the MPCA will be required to enter or conduct work in order to carry out the terms of this Order. The Company shall not be required to acquire an easement or any other interest in land or pay any unreasonable access fees as part of its efforts to obtain access. If the Company is unable to obtain access using its best efforts, the MPCA agrees to exercise its authority under Minn. Stat. § 115B.17, subd. 4 (Supp. 1983) to obtain access to property necessary to carry out this Order.

XXIII.

Effective Date

This Order is effective upon the date the last required signature is affixed hereto.

IT IS SO AGREED AND ORDERED:

By: Wayne M. Nelson V.P./Gen. Mgr.
Nutting Truck & Caster Title

4-19-84
Date

Cynthia C. Jepsen
Chairperson, Minnesota Pollution Control
Agency

4-24-84
Date

Jan M. Heffern
Executive Director, Minnesota Pollution
Control Agency

4-26-84
Date

Exhibit A

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

I. INTRODUCTION

Parts III and V of the Response Order by Consent (Order), to which this Exhibit is appended, require The Nutting Company (Nutting) to conduct a Remedial Investigation (RI) and conditionally, to conduct a Feasibility Study (FS) of the Nutting property and impacted areas off of the Nutting property (Faribault site). This Exhibit sets forth the requirements for completing the RI and, if required, the FS and is appended to and made an integral and enforceable part of the Order.

II. PREPARATION AND REVIEW OF SUBMITTALS

Nutting shall submit to the Minnesota Pollution Control Agency Director (MPCA Director) all reports, work plans, well placement and construction plans, quality control plans, and other submittals required by this Exhibit. The review, modification and approval of all these submittals shall be governed by Part VI of the Order, except that the site safety and security plans described in Part IV of Exhibit A do not require MPCA Director approval.

III. RETAIN CONSULTANT

Within seven (7) days of the effective date of the Order, Nutting shall retain a consultant(s) qualified to undertake and complete the requirements of this Exhibit and shall notify the MPCA Project Leader of the name of that consultant(s).

IV. SITE SECURITY AND SAFETY PLANS

Nutting shall prepare and submit to the MPCA Director for comment (1) a Faribault site security plan to limit and control the general public's access to areas of the Faribault site, to the extent possible, when Nutting is on the site undertaking actions required by the RI and (2) a Faribault site safety plan to protect the health and safety of personnel involved in the RI, and, if required, the FS.

The Faribault site security and safety plans shall be submitted at the same time that the Proposed RI Work Plan is submitted, pursuant to Part V, Task A, below. The Faribault site safety plan shall incorporate and be consistent with the requirements of:

1. Section 111(c)(6) of CERCLA;
2. EPA Order 1440.3 -- Respiratory Protection;
3. EPA Order 1440.2 -- Health and Safety Requirements for Employees Engaged in Field Activities;
4. EPA Occupational Health and Safety Manual

The MPCA Director may comment on the Faribault site security and safety plans but will neither approve nor disapprove those plans.

Nutting shall implement the Faribault site security and safety plans, taking into account the comments of the MPCA Director, if any, when it conducts the RI, pursuant to Part V, below.

V. REMEDIAL INVESTIGATION

Nutting shall design and implement an RI which accomplishes the purposes and meets the requirements of this Part. The purposes of the RI are (1) to

determine the extent of ground water contamination originating from the Nutting property and (2) to provide information to determine whether an FS will be necessary.

The requirements of the RI are set forth in the three tasks below.

Task A. Submit an Evaluation Report, Proposed RI Work Plan and Quality Assurance/Quality Control Plan

Within 45 days of the effective date of the Order, Nutting shall submit for MPCA Director review and approval an Evaluation Report, a Proposed RI Work Plan and a Quality Assurance/Quality Control Plan (QA/QC Plan). These submittals may be combined in a single document.

The Evaluation Report shall contain the information set forth in Task A.1. below.

The Proposed RI Work Plan shall contain the information set forth in Task A.2. below. The QA/QC Plan shall contain the information set forth in Task A.3. below. The Evaluation Report, the Proposed RI Work Plan and the QA/QC Plan shall be reviewed, modified and/or approved by the MPCA Director in accordance with Part VI of the Order.

A.1. Evaluation Report

a. Site background

The Evaluation Report shall include an explanation of the operational history of Nutting, including Nutting's past disposal practices on the Nutting property, location, pertinent area boundary features, and the general physiography, hydrology, stratigraphy, and geology of the Faribault site.

b. Topographic Maps

Using existing available data, the Evaluation Report shall include Faribault site maps using a suitable scale and contour interval. Surface water

features, buildings, process areas, storage tanks, well locations, forested areas, utilities, paved areas, easements, right-of-ways, pipelines (surface and subsurface) and impoundments shall be shown to the extent necessary to carry out the requirements of this Order. The maps shall be of sufficient detail and accuracy to locate all current or proposed future work at the Faribault site.

c. History of remedial or removal actions

The Evaluation Report shall include a summary of any previous response actions taken by Nutting at the Nutting property. This summary shall include field inspections, sampling surveys, cleanup activities, and other technical investigations as well as any removal or remedial action taken at the Nutting property by Nutting.

✓ A.2 Proposed Remedial Investigation Work Plan

Nutting shall submit a proposed RI Work Plan which, upon implementation:

(a) will determine the extent of ground water contamination originating from the Nutting property; (b) will produce sufficient data and information to allow Nutting to submit the report described in Task C, below; and, (c) will produce data sufficient to determine whether an FS is necessary.

The proposed RI Work Plan shall include proposed methodologies to accomplish the following RI activities and shall also include proposed dates and/or time intervals for initiation and completion of each of the following RI activities:

a. Source Investigation

The seepage pit which Nutting excavated in 1980 appears to be a primary source of release of hazardous substances which have been detected by the monitoring wells installed by Nutting on Nutting property. However, sampling results from the upgradient well on Nutting property, as well as a statement

from a Nutting employee, indicate the presence of one or more disposal sites located either on or off of the Nutting property.

Nutting shall determine whether wastes, other than foundry wastes, have been disposed on other portions of the Nutting property by taking soil borings. Soils shall be analyzed, if contamination is suspected, to determine which contaminants are present.

Nutting shall determine the extent of contamination from any additional contamination sources, other than foundry wastes, which are discovered. Nutting may present any documents as part of the RI work plan in support of a position to limit or eliminate further source investigation.

b. Hydrogeologic Investigation

(1) Drift/St. Peter Aquifer Water Quality

The impacts of Nutting's disposal practices on the drift/St. Peter aquifer beyond the boundary of the Nutting property are unknown. Nutting shall identify these impacts by accomplishing the following.

Phase One

Install, at Nutting's discretion, one well upgradient of the Nutting property and install three monitoring wells downgradient of the Nutting property in the drift/St. Peter aquifer. If Nutting does not install an upgradient well during phase one, the MPCA may require the installation of an upgradient well pursuant to Task D, if the information reported in Task C demonstrates the need for an upgradient well. All drift/St. Peter aquifer monitoring wells shall be installed so that representative water samples are obtained. Well screens in the St. Peter aquifer wells shall be set from the top of the underlying basal layer up to a point which is above the saturation level, unless the MPCA Director approves an alternative well screening plan. Monitoring and sampling shall be addressed in Task A.2.d. Nutting shall submit proposed St. Peter well locations and construction details.

(2) Basal St. Peter Layer Investigation

The integrity of the basal layer in the St. Peter sandstone as it relates to preventing downward migration of ground water and ground water contamination is unknown. Nutting shall characterize the basal layer in the St. Peter sandstone by means of retrieving and analyzing core samples, or another method acceptable to the MPCA Director.

(3) Prairie du Chien Aquifer Water Quality

The impacts of Nutting's waste disposal practices on the Prairie du Chien aquifer are unknown. Nutting shall identify these impacts by accomplishing the following tasks.

Phase One

Nutting shall submit a proposed location and construction detail for a Prairie du Chien aquifer monitoring well. If the proposed Prairie du Chien well is not located very near a St. Peter aquifer well, a new St. Peter well shall be constructed next to the Prairie du Chien well in order to provide a vertical ground water quality and gradient profile. All Prairie du Chien aquifer monitoring wells shall be installed so that representative water samples are obtained. Monitoring and sampling shall be addressed in Task A.2.d.

(4) Phase One Report/Additional Phases -

Nutting shall submit a Phase One Report to the MPCA Director which, to the extent allowed by the data, identifies the levels and extent of contamination from the Nutting property in the drift/St. Peter and Prairie du Chien aquifers and which characterizes the basal layer of the St. Peter sandstone. Nutting shall also recommend concentrations for sampling parameters which shall serve as a basis for determination of the need for additional drift/St. Peter and Prairie

du Chien wells. Based on these recommended concentrations, Nutting shall further submit a recommendation on the need for, and if recommended, the location and construction details of additional drift/St. Peter and Prairie du Chien wells in order to define the levels and extent of contamination.

The MPCA Director shall review and accept or reject Nutting's Phase One Report, including Nutting's recommendations on 1) concentrations for sampling parameters to serve as a basis for determination of the need for additional drift/St. Peter and Prairie du Chien wells, and 2) the need for and, if recommended, the locations of additional drift/St. Peter and Prairie du Chien wells.

If the MPCA Director rejects any of Nutting's recommendations, the MPCA Director shall specify the reasons for the rejection. Any dispute between Nutting and the MPCA Director regarding the concentrations for sampling parameters to serve as a basis for determination of the need for additional drift/St. Peter and Prairie du Chien wells and the need for and, if recommended, the location of such additional wells shall be resolved pursuant to Part VI of the Order.

If the MPCA Director determines that additional drift/St. Peter wells and/or Prairie du Chien wells are necessary, Nutting shall construct these wells, analyze the samples from these wells and submit a Phase Two Report, including, to the extent allowed by the data, identification of levels and extent of contamination and a recommendation as to the need for additional wells. Nutting shall repeat this process of well location and construction, sampling and submittals until the MPCA Director determines that the levels and extent of contamination from the Company's property in the drift/St. Peter and Prairie du Chien aquifers are defined in accordance with the concentrations for sampling parameters used to determine the need for additional wells.

c. Proposed Remedial Investigation Time Schedule

Nutting shall propose dates and/or time intervals for initiation and completion of all remedial investigation activities proposed in the RI Work Plan. The remedial investigation activities for which Nutting shall propose a time schedule shall include the following:

1. Submit proposal for drift/St. Peter well locations and construction details.
2. Begin construction of drift/St. Peter wells.
3. Complete construction of drift/St. Peter wells.
4. Complete analysis of samples for drift/St. Peter wells.
5. Submit proposal for source investigation.
6. Begin source investigation.
7. Complete source investigation.
8. Submit proposal for basal St. Peter investigation.
9. Conduct basal St. Peter investigation.
10. Complete analysis of basal St. Peter layer.
11. Submit proposal for Prairie du Chien (PdC) and companion drift/St. Peter well locations, if necessary, and construction details.
12. Begin construction of PdC well.
13. Begin construction of companion drift/St. Peter well, if necessary.
14. Complete construction of PdC well.
15. Complete construction of companion drift/St. Peter well, if necessary.
16. Complete analyses of samples from PdC and any companion drift/St. Peter wells.
17. Submit document describing level and extent of contamination, basal layer report, and recommendations for concentrations for sampling parameters and for additional PdC wells.
18. Repeat(s) of 1-4 and 11-17 as necessary.

d. Routine Monitoring and Sampling Plan

Nutting shall submit a proposed first year schedule for short term and long term monitoring for all existing and all newly constructed monitoring wells and a sampling plan which proposes locations, quantity and frequency of sampling, sampling methods, and parameters for analysis. The sampling parameters shall include initially total organic carbon, total dissolved solids, metals, and halogenated and non-halogenated hydrocarbons. A balance for major cations and anions shall also be performed. The analysis for metals shall initially include, cadmium, total chromium, lead, nickel, and cyanide. The list of hydrocarbons shall initially include methylene chloride, trichloroethylene, 1,1-dichloroethylene, 1,1-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, carbon tetrachloride, xylene, benzene and toluene. The sampling plan, including locations, quantity, and frequency of sampling, sampling methods, and parameters for analysis may be modified by Nutting with MPCA Director approval as data is collected, or by the MPCA Director based on the results of the source investigation.

A.3. Quality Assurance/Quality Control Plan

Nutting shall submit a proposed QA/QC Plan to be utilized in implementing the RI Work Plan. The proposed QA/QC Plan shall be prepared so as to be consistent with the requirements of the U.S. EPA's Contract Laboratory Program.

The proposed QA/QC Plan shall specify the procedures for:

- a. sample collection;
- b. chain-of-custody;
- c. calibration in terms of accuracy, precision, and references (the QA/QC Plan shall also specify the number of times and intervals at which analysis equipment will be calibrated);
- d. laboratory analytical methods, including methods for ensuring accurate measurements of data in terms of precision, accuracy, completeness, and comparability;

- e. reporting;
- f. internal quality control;
- g. audits;
- h. preventive maintenance;
- i. corrective action; and,
- j. routine assessment of data precision, representativeness, comparability, accuracy, and completeness of specific measurement parameters involved.

Task B. Conduct Remedial Investigation

Within fifteen (15) days of notification of the MPCA Director's approval or modification of the RI Work Plan and the QA/QC Plan, Nutting shall initiate the RI. Nutting shall conduct the RI in accordance with the methodologies and time schedules set forth in the RI Work Plan and QA/QC Plan as approved or modified by the MPCA Director. The RI shall be conducted in accordance with all applicable laws in existence at the time of the RI including 7 MCAR §§ 1.210-1.224 for the installation of any ground water monitoring wells.

Task C. Report Results of Remedial Investigation

Within ninety (90) days of the receipt of the last laboratory analysis of samples from the wells installed under Task B, Nutting shall prepare and submit to the MPCA Director a report detailing the data and results of the RI. The report shall organize and present all data, analytical results, boring logs and test results. Further, the report shall:

- (a) identify the extent of ground water contamination originating from the Nutting property in the drift/St. Peter and Prairie du Chien aquifer;
- (b) characterize the confining layer at the base of the St. Peter sandstone; and

(c) present the results of the source investigation, if required.

Nutting shall include an assessment of the impact of the ground water contamination originating from the Nutting property on current and future ground water use, including any impact on private wells and Faribault municipal wells, and a recommendation on the need for an FS.

Task D. Acceptance of the Final Report and Determination of the Need for a Feasibility Study

The MPCA Director shall notify Nutting of the Director's acceptance or rejection of the final report and determination of the need for an FS. If the MPCA Director rejects the final report, the MPCA Director shall specify the deficiencies and reasons for the rejection. Nutting shall correct the deficiencies, and resubmit the final report to the MPCA Director within thirty (30) days of MPCA Director notification of rejection. If collection of additional data is necessary to correct the deficiencies, the MPCA Director shall extend the due date for resubmittal of the final report by up to ninety (90) days upon request by Nutting.

The MPCA Director shall base a determination on the need for an FS on the following factors:

1. The level and extent of existing and anticipated future ground water contamination originating from the Nutting property in the drift/St. Peter and the Prairie du Chien aquifers and the effect of this contamination on private wells and Faribault municipal wells.
2. The character of the confining layer at the base of the St. Peter sandstone.
3. The level of ground water contamination detected in monitoring wells, private wells and Faribault municipal wells during the course of the RI.

4. An identifiable remedial action which remedies contamination of private wells and the Faribault municipal wells and is technically feasible, cost effective, and without significant adverse impact on the environment.

If the MPCA Director rejects Nutting's recommendation on the need for an FS, the MPCA Director shall specify the reasons for the rejection. If the MPCA Director determines that an FS is required, she may require that Nutting gather and submit additional information if the MPCA Director determines that the report does not contain sufficient information to allow for development of an FS for the Faribault site. Any dispute between Nutting and the MPCA Director regarding the need for an FS and/or the need for additional information to prepare an FS shall be resolved pursuant to Part VI of the Order.

If sources of contamination which are suspected to have resulted from disposal practices of a person(s) other than Nutting are identified in or near the area of the RI conducted under this Order prior to the commencement of the FS, and are believed to contribute to contamination in or near the area, the MPCA Director shall direct Nutting to (1) temporarily suspend work on the FS pending completion of other remedial investigatory activities in the area, or (2) complete an FS with respect to only those contaminants which have resulted from Nutting's disposal practices.

VI. FEASIBILITY STUDY

The purpose of the Feasibility Study (FS) is to identify and assess remedial actions to remedy contamination of ground water, including remedies for contamination, if any, of private wells and Faribault municipal wells. The FS shall use and build upon the information generated by the RI and consists of the following Tasks.

Task A. Identification of Response Action Objectives, Alternative Response Actions to be Addressed and Discussion of Alternative Response Actions

1. Identification of Objectives and Alternatives

Within thirty (30) days of the MPCA Director's determination that an FS shall be conducted, Nutting shall submit to the MPCA Director a list of objectives to be accomplished by any response action at the Faribault site and alternative response actions which may accomplish the stated objectives and which are technologically feasible, cost-effective, and in accordance with sound engineering practice, which alternatives shall be addressed in the Alternatives Report.

Nutting shall also submit to the MPCA Director a brief description of alternative response actions which Nutting believes are not cost effective, but which may accomplish the stated objectives and which are likely to be technologically feasible and in accordance with sound engineering practice.

The MPCA Director shall notify Nutting of her acceptance, modification, or rejection of the objectives and response action alternatives to be addressed in the FS. If the MPCA Director modifies or rejects any of the objectives or response action alternatives to be addressed in the FS, the MPCA Director shall specify the deficiencies and reasons for the modification or rejection. Any dispute between Nutting and the MPCA Director regarding the objectives to be accomplished by any response action at the Faribault site and those alternative response actions that will be addressed in the FS shall be resolved pursuant to part VI of the Order.

Within one hundred twenty (120) days of the MPCA Director's determination of the response action objectives and alternatives to be addressed in the FS, Nutting shall develop and submit to the MPCA Director an Alternatives Report. The Alternatives Report shall provide an evaluation of each of the alternative

response actions identified for discussion in the FS. (The alternative response actions to be evaluated in the Alternatives Report are referred to below as the "evaluated alternatives.")

The Alternatives Report shall contain the following:

a. Establishment of Response Action Objectives

In the Alternatives Report, Nutting shall analyze the extent to which each of the evaluated alternatives meets each of the objectives to be accomplished by any response action at the Faribault site as determined by the MPCA Director under Task A.1.

b. Identification of Remedial or Removal Technologies

The Alternatives Report shall include an explanation of the various technologies which may be employed to implement each of the evaluated alternatives and shall summarize the effectiveness, reliability, and availability of each specified technology.

2. Discussion of Alternative Response Actions

For each evaluated alternative, the following shall be addressed and presented in the Alternatives Report:

a. Cost

A preliminary estimate of the capital, operation and maintenance costs associated with installing or implementing each evaluated alternative.

b. Environmental Effects

A general discussion of the expected adverse effects which each evaluated alternative may have on the environment;

c. Effectiveness

A preliminary analysis as to whether each evaluated alternative is likely to effectively abate or minimize the release or threatened release and/or minimize the threat of harm to the public health, welfare and the environment.

d. Technical Feasibility and Implementability

A preliminary analysis of the technical feasibility and implementability of each evaluated alternative both in relation to the location and conditions of the release or threatened release and in relation to the reliability of the technologies which could be employed to implement the evaluated alternative.

3. Recommendation on the Need for a Detailed Analysis

Following discussion of each evaluated alternative, Nutting shall make a recommendation on a need for a Detailed Analysis Report based on the criteria set forth in Task B, below, and, if recommended, the alternative or alternatives to be addressed in the Detailed Analysis Report and the scope of the detail description of each alternative to be evaluated in the Detailed Analysis Report.

Task B. Screening of Remedial or Removal Action Alternatives

Upon receipt of the Alternatives Report submitted pursuant to Part VI, Task A, above, the MPCA Director will review and screen the evaluated alternatives and may reject any of the evaluated alternatives that are not feasible or effective in accomplishing the objectives set forth pursuant to Task A.1. The MPCA Director will notify Nutting of the results of the MPCA Director's review and screening within twenty-one (21) days of MPCA receipt of the Alternatives Report and determination on the need for a Detailed Analysis Report. Any dispute between Nutting and the MPCA Director on the screening of a recommended alternative or alternatives or the need for a Detailed Analysis Report shall be resolved pursuant to Part VI of the Order.

In determining whether to reject an evaluated alternative, the MPCA Director will use the following criteria as they relate to the objectives set forth in Task A.1.:

1. Cost

Evaluated alternatives whose estimated costs substantially exceed those of other evaluated alternatives in relation to the benefits which the evaluated alternatives will produce will be eliminated, unless Nutting explicitly desires to further consider the evaluated alternative.

2. Environmental effects

Evaluated alternatives that inherently present significant adverse environmental effects will be excluded from further consideration.

3. Effectiveness

Evaluated alternatives that do not satisfy the response action objectives and do not contribute significantly to the protection of public health, welfare or the environment will be rejected. On-site hazardous substance control alternatives must achieve adequate control of the hazardous substances in terms of abating or minimizing the release or threatened release. Off-site alternatives must minimize or mitigate the threat of harm to public health, welfare or the environment or will be excluded from further consideration.

4. Technical Feasibility and Implementability

Evaluated alternatives that may be substantially more difficult to implement, or that rely on unproven technologies will be excluded from further consideration. Evaluated alternatives that are not reliable will be excluded from further consideration.

The MPCA Director shall base a determination on the need for a Detailed Analysis Report on the following factors:

1. The number of remaining evaluated alternatives;
2. Whether a Detailed Analysis Report is required to make a decision on remaining evaluated alternative(s), based on the criteria set forth in Task B;

3. The additional information that is likely to be compiled in a Detailed Analysis Report which is not contained in the Alternatives Report; and
4. The cost of preparing the Detailed Analysis Report.

Task C. Detailed Analysis Report

Within one hundred twenty (120) days of the MPCA Director's notification made pursuant to Part VI, Task B, Nutting shall prepare and submit a Detailed Analysis Report to the MPCA Director on all the evaluated alternatives not rejected by the MPCA Director, if the MPCA Director determines there is a need for a Detailed Analysis Report. The Detailed Analysis Report shall present the results of an analysis of each of the remaining evaluated alternatives and shall include:

1. Detailed Description

Nutting shall prepare and present a detailed description for each of the remaining evaluated alternatives, including, if applicable:

- a. a description of appropriate treatment and disposal technologies;
- b. a description of the special engineering considerations required to implement the remaining evaluated alternatives (e.g., for a pilot treatment facility, any additional studies that may be needed to proceed with final response action design);
- c. a description of operation, maintenance, and monitoring requirements of the remaining evaluated alternatives;
- d. a description of off-site disposal needs and transportation plans;
- e. a description of temporary storage requirements;

f. a description of safety requirements associated with implementing the remaining evaluated alternatives, including both on-site and off-site health and safety considerations;

g. a description of how the remaining evaluated alternatives could be phased into individual operations and how these operations could best be implemented, individually or in groups, to produce significant environmental improvement or cost savings; and,

h. a review of off-site treatment or disposal facilities to ensure compliance with applicable RCRA and MPCA hazardous waste rules.

2. Environmental Assessment

The Detailed Analysis Report shall include an environmental assessment for each remaining evaluated alternative which includes an evaluation of each alternative's environmental effects, an analysis of measures to mitigate adverse effects, physical or legal constraints, and compliance with Federal and State regulatory requirements.

Each remaining evaluated alternative shall be assessed in terms of the extent to which it will mitigate damage to, or protect public health, welfare and the environment, in comparison to the other remaining evaluated alternative(s).

3. Cost Analysis

Nutting shall analyze and present in the Detailed Analysis Report the present value capital cost and annualized capital costs of implementing each remaining evaluated alternative (and each phase of the remaining evaluated alternative(s)) as well as the present value annual operating and maintenance costs. The costs shall be presented as both a total cost and an equivalent annual cost.

Task D. Approval of Recommended Response Action Alternative

If a Detailed Analysis Report is determined to not be needed or if more than one alternative is addressed in the Detailed Analysis Report, Nutting shall recommend the response action alternative (or combination of alternatives) that Nutting determines should be installed or implemented at the Faribault site together with the reasons for recommending the alternative(s).

The MPCA Director shall review the response action alternative recommended by Nutting under Task B or Task C, as appropriate, and shall approve or reject the alternative based on the objectives set forth pursuant to Task A.1. and the criteria set out in Task B of this Part. If the MPCA Director rejects the response action alternative, Nutting shall propose for review by the MPCA Director another response action alternative and shall submit its proposal to the MPCA Director within twenty-one (21) days after receiving notice that the MPCA Director has rejected a previously selected alternative. If collection of additional data is necessary to propose another response actions alternative, the MPCA Director may extend the due date for resubmittal of the proposal by up to ninety (90) days upon request by Nutting. Any dispute between Nutting and the MPCA Director on the recommended alternative shall be resolved pursuant to Part VI of the Order.

3121 Nicollet Avenue □ Minneapolis, Mn. 55403 □ Phone: (612) 824-2875

July 27, 1979

City of Faribault
Faribault
Minnesota 55021

Attn: Mr. Howard Helgeson
P. O. Box 84

REPORT OF LABORATORY ANALYSIS

Date Sample(s) Collected:
Date Sample(s) Received: July 11, 1979

<u>Parameter</u>	<u>Anaerobic Digested Sludge</u>
pH	7.3
Total Solids, %	0.9
Total Volatile Solids, %	58.9
Ammonia Nitrogen, mg/kg dry weight	73,000 657 mg/l
Kjeldahl Nitrogen, mg/kg dry weight	120,000 1080 mg/l
Zinc, mg/kg dry weight	2,000
Copper, mg/kg dry weight	920
Nickel, mg/kg dry weight	200
Lead, mg/kg dry weight	120
Cadmium, mg/kg dry weight	12
Mercury, mg/kg dry weight	2.8
Chromium, mg/kg dry weight	730
Polychlorinated Biphenyl, mg/kg dry weight ⁽¹⁾	3.3

(1) Analysis performed by subcontracted laboratory.

The data contained in this report was obtained using EPA approved methodologies. All analyses were performed by me or under my direct supervision.

William A. O'Connor
William A. O'Connor, Analytical Chemist
Laboratory Director

cc: Mr. Chuck Schmit

3121 Nicollet Avenue ☐ Minneapolis, Mn. 55408 ☐ Phone: (612) 824-2675

April 22, 1980

City of Faribault
P. O. Box 84
Faribault, Minnesota 55021

Attn: Mr. Howard Helgeson

RECEIVED
SEP 14 1981
MINN. POLLUTION
CONTROL AGENCY

REPORT OF LABORATORY ANALYSIS

Date Sample(s) Collected:
Date Sample(s) Received: March 27, 1980

<u>Parameter</u>	<u>Sludge</u>
pH	6.9
Total Solids, %	2.4
Total Volatile Solids, %	69.2
Ammonia Nitrogen, mg/kg dry weight	32,000
Kjeldahl Nitrogen, mg/kg dry weight	88,000
Copper, mg/kg dry weight	880
Cadmium, mg/kg dry weight	8
Nickel, mg/kg dry weight	120
Lead, mg/kg dry weight	210
Zinc, mg/kg dry weight	2500
Chromium, mg/kg dry weight	330
Mercury, mg/kg dry weight	1.2
Potassium, mg/kg dry weight	5000
Total Phosphorus, mg/kg dry weight	19,000
Polychlorinated Biphenyl, ⁽¹⁾ mg/kg dry weight	0.5

(1) Analysis performed by a subcontracting laboratory.

The data contained in this report was obtained using EPA approved methodologies. All analyses were performed by me or under my direct supervision.

William A. O'Connor

William A. O'Connor, Analytical Chemist
Laboratory Director

3121 Nicollet Avenue ☐ Minneapolis, Mn. 55408 ☐ Phone: (812) 824-2675

August 19, 1980

City of Faribault
P.O. Box 84
Faribault, Minnesota 55021

Attn: Mr. Howard Helgeson

REPORT OF LABORATORY ANALYSIS

Date Sample(s) Collected:
Date Sample(s) Received: July 8, 1980

<u>Parameter</u>	<u>Sludge</u>
pH	6.9
Total Solids, %	3.0
Total Volatile Solids, %	64.0
Ammonia Nitrogen, mg/kg dry wt.	31,000
Kjeldahl Nitrogen, mg/kg dry wt.	77,000
Zinc, mg/kg dry wt.	1700
Copper, mg/kg dry wt.	1000
Nickel, mg/kg dry wt.	110
Lead, mg/kg dry wt.	230
Cadmium, mg/kg dry wt.	7.7
Total Phosphorus, mg/kg dry wt.	25,000
Potassium, mg/kg dry wt.	3600

The data contained in this report was obtained using EPA approved methodologies.
All analyses were performed by me or under my direct supervision.

William A. O'Connor

William A. O'Connor, Analytical Chemist
Laboratory Director

3121 Nicollet Avenue □ Minneapolis, Mn. 55408 □ Phone: (612) 824-2675

November 4, 1980

City of Faribault
P.O. Box 84
Faribault, Minnesota 55021

Attn: Mr. Howard Helgeson

REPORT OF LABORATORY ANALYSIS

Date Sample(s) Collected:
Date Sample(s) Received: October 7, 1980

<u>Parameter</u>	<u>Sludge</u>
pH	7.4
Total Solids, %	3.0
Total Volatile Solids, %	59.5
Ammonia Nitrogen, mg/kg dry wt.	32,000
Kjeldahl Nitrogen, mg/kg dry wt.	77,000
Zinc, mg/kg dry wt.	2100
Copper, mg/kg dry wt.	1000
Nickel, mg/kg dry wt.	140
Lead, mg/kg dry wt.	290
Cadmium, mg/kg dry wt.	60
Total Phosphorus, mg/kg dry wt.	22,000
Potassium, mg/kg dry wt.	3700

The data contained in this report was obtained using EPA approved methodologies. All analyses were performed by me or under my direct supervision.

William A. O'Connor

William A. O'Connor, Analytical Chemist
Laboratory Director